Meeting notes for April 5, 2004 I++ DME implementer's conference call

Meeting secretary: John Horst

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Name	Organization	Present
Ray Admire	Lockheed Martin	
Manfred Becker	Zeiss	✓
Perluigi Borgogno	Wilcox Associates	✓
Joe Falco	NIST	✓
Swen Haubold	Mitutoyo	
John Horst	NIST	✓
René Keller	Metromec	✓
Tom Kramer	NIST	✓
Chuck Leckenby	Tecnomatix	
Mike Martini	General Electric Transportation	
Günter Moritz	Messtechnik Wetzlar	
Michel Penlae	Wilcox Associates	✓
Chiratana Pot	Tecnomatix	✓
Walter Punegam	Zeiss	
Josef Resch	Zeiss	✓
Bill Rippey	NIST	✓
John Rosser	Renishaw	
Ken Sheehan	Entelegence	
Dave Smith	LK	✓
Rob Stewart	Daimler-Chrysler	
Keith Stouffer	NIST	
Tim Taylor	General Electric Transportation	
Mark Vinson	Boeing	
Bob Waite	Daimler-Chrysler	
Betsy Weddendorf	General Electric Transportation	
Martin Wimmer	Zeiss	

1 Discussion of successes in (and barriers to) client $\Longleftrightarrow$ server connections

The following have completed these tests: Wilcox client to Wilcox server. Tecnomatix client to Zeiss server. Tecnomatix client to Wilcox server. Zeiss client to Wilcox server. Tecnomatix client to LK server. NIST client to Zeiss server. LK client to Wilcox. LK client to Metromec server. Wilcox client to LK server. Metromec client to LK server. Wilcox client to Metromec server. Wilcox client to Zeiss server. Metromec client to Zeiss server. Zeiss server to Metromec client.

John suggested that with these successes, it seems that we should be ready for interoperability testing using the simple part with the accompanying DMIS program. This part was previously supplied by NIST to certain participants. (If anyone doesn't have this part and wants one, please contact John Horst of NIST.) This suggestion was tacitly agreed to and John promised to send the updated interoperability testing schedule along with these meeting notes.

2   Progress and feedback on the spec

Dave mentioned that a use case on component sensor geometry is soon to be sent to the I++ group. He pointed out that there are many DMIS 4.0 commands in the component sensor geometry category.

3   Progress and feedback on the test suite

No discussion or feedback was offered.

4   Progress on I++ DME implementations

No reports on progress were given.

5   Discussion of topics relating to the planned IMTS demo (of I++ DME interoperability)

John presented the challenge of performing the sequential execution of a variety of clients and servers at the booth. He suggested that to realize automated sequential execution of all the different client/server combinations would take too much time and work, given the small amount of time available for testing during equipment setup at our IMTS booth, if such testing were required. He first asked the group whether a simple local area network with a single hub would work for the demo. No one objected to this proposal. He then asked the group whether an automated method (like using scripts in UNIX) can be done easily with PCs. As the discussion progressed, it became clear that each client application has differing ways that 1) it specifies each unique server connection and 2) allows an external "program" to start execution of the client application. For example, LK uses a configuration file (which could be made public) to specify a particular server. Michel said that they change a value in the registry to do the same.

Michel suggested that a "master PC" on the LAN could cycle through a batch file that specifies that "client A runs with server X, then client B runs with server X, then client A runs with server Y, and so on." The consensus of the group seemed to be that each client implementer could engineer its own unique executable that a batch file on the master PC could call and execute at any time. The master PC would simply specify the particular client and server combination to be executed and perhaps accompany this information with IP address and inspection program information.

It was then suggested that the client-side implementers determine how to configure their software to be "callable" by a batch file on the master PC, gracefully exit, and be prepared to execute in this manner again and again.

6   Progress on previous meeting's to-do list

- *NIST will add more detail about socket errors in its reporting of errors on the client-side test utility.*

  Detailed reporting on socket-related errors is now in the NIST client-side utility. It should appear, at the latest, in the next version of the test suite, probably not until the end of May or June.

- *Advance the server-side test utility to include various test cases*

  No progress. Probably cannot work on this until May.

- *Client-side implementers will send example log files to NIST to aid NIST in development of a log file → I++ DME command file parser.*

  NIST received an example log file from René only.

- *To address the problem of differing machine coordinate limits and ranges for differing real CMM systems, NIST will build a utility that translates and/or rotates coordinate values in command files and what ever else is necessary. NIST also plans to allow the test suite user to enter a tool name through this additional utility.*

  NIST is planning to complete this task before the end of May.

- *NIST plans to add the ability to automate test file execution to the client-side utility.*

  Not completed.

- *NIST also plans to add several useful preset commands in separate windows (or as a pulldown menu), such as StopSession, EndSession, ClearAll, and Rewind, to the client-side utility.*

  Not completed.

7   New and outstanding action items

- Each client-side implementer needs to determine how to configure his software to be "callable" by a batch file on the proposed "master PC," gracefully exit, and be prepared to execute in this manner again and again. Reporting on these results will be at the next conference call meeting.

- Client-side implementers will send example log files to NIST to aid NIST in development of a log file -> I++ DME command file parser.

- Advance the server-side test utility to include various test cases

- To address the problem of differing machine coordinate limits and ranges for differing real CMM systems, build a utility that (as part of the test suite) translates and/or rotates coordinate values in command files and what ever else is necessary. Allow the test suite user to enter a tool name through this additional utility.

- Add the ability to automate test file execution to the client-side utility.

- Add several useful preset commands in separate windows (or as a pulldown menu), such as StopSession, EndSession, ClearAll, and Rewind, to the client-side utility.

- Add more detail about socket errors in its reporting of errors on the client-side test utility.

 Since the I++ developers meeting is being held April 20 - 21, our next meeting will be May 3, 2004. Talk with you then!